

Opioid Poisoning and Abuse among Coconino County Residents June 2017

Introduction

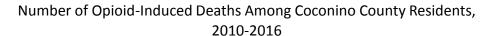
Opioid abuse in the U.S. was highlighted by the Centers for Disease Control and Prevention (CDC) as early as 2012, with opioid overuse and deaths from opioids rising since then. Opioid abuse includes illicit opioids such as heroin and synthetic opioids (e.g., fentanyl) which are sold illegally as well as oxycodone and codeine which can be prescribed by medical providers. The opioid epidemic is now so severe that on June 5, 2017, Governor Doug Ducey signed an emergency declaration to address the situation in Arizona.

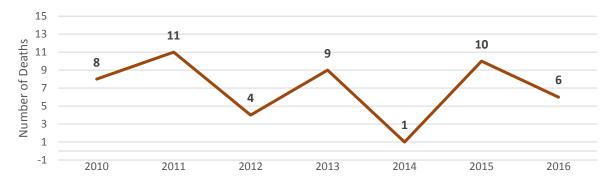
As the epidemic was becoming known nationally, the Coconino County Public Health Services District sought out data to measure the extent of the problem in the county. This report is an analysis of the most recent data available on opioid deaths and hospital visits related to opioids.

Opioid Poisoning Deaths

Has the number of opioid deaths in Coconino County been increasing?

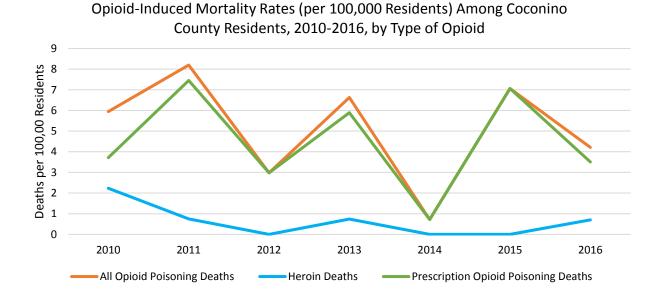
Opioid overdose deaths have not increased since 2010; in fact, the number of deaths each year has not varied widely. As shown below, from 2010 to 2016, there were 49 opioid-induced deaths among Coconino County residents.*





^{*}Opioid deaths in this chart are those directly attributable to opioids, with an underlying cause of drug poisoning or addiction.

Over the six-year period, 88% of opioid-induced deaths involved a prescription opioid, and 12% involved heroin. As shown in the chart below, deaths related to prescription opioid use have been more common than deaths related to heroin use every year and neither type has increased dramatically over time.



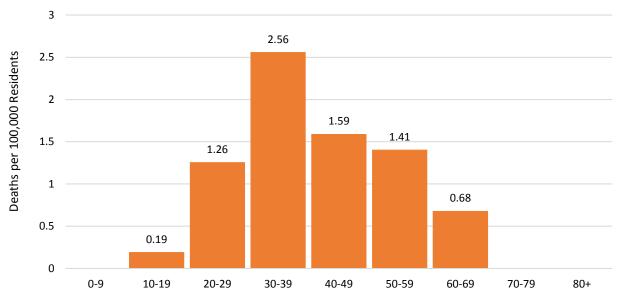
How bad is the problem in Coconino County compared to other places?

Coconino County was 12th of 15 Arizona counties in opioid-related deaths in 2016 and 6th in 2011, the year with the highest rate of opioid overdose deaths in the county. At its highest point (2011), there were 8.2 deaths per 100,000 residents in Coconino County. This rate was at about the same as Arizona's rate (8.4). Looking at the past ten years of opioid-induced deaths, the Coconino County rate is 5.6 deaths per 100,000 residents while the comparable rate for Arizona is 8.8. (Both state and county rates were calculated from 2011 population denominators.)

Who is at risk for an opioid poisoning death?

People at highest risk were young to middle-aged adults. Very few opioid poisoning deaths occurred among persons under 20 years (only one death in the four-year period) or over 69 years of age (no deaths). The chart below shows the mortality rates for various age groups.

Average Annual Mortality Rate from Opioid Poisoning (Deaths per 100,000) by Age Group, 2011-2014

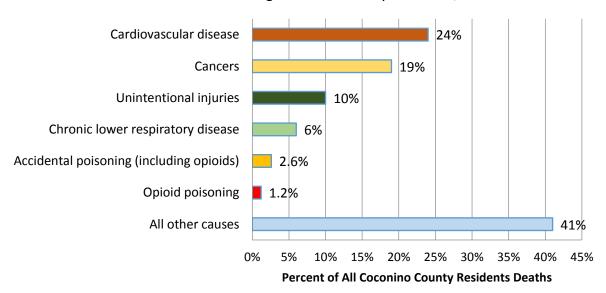


Deaths occurred most commonly in white non-Hispanic individuals (85%). Seventy percent (70%) of those who died from an opioid-induced death were male (not shown in chart).

Are opioid deaths one of the leading causes of death in Coconino County?

Accidental poisoning deaths accounted for 2.6% of deaths to Coconino County residents in 2015; opioid poisoning deaths accounted for slightly over 1% of deaths (1.2%). Leading causes of death were cardiovascular disease (24%), cancers (19%), unintentional injuries (10%), and chronic lower respiratory diseases (6%).

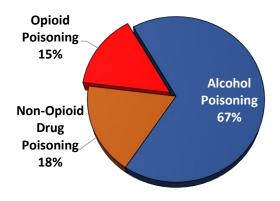
Causes of Death Among Coconino County Residents, 2015



Are opioid deaths a big part of all poisoning deaths?

Among Coconino County resident deaths, opioids are a small proportion of all drug and alcohol induced deaths.

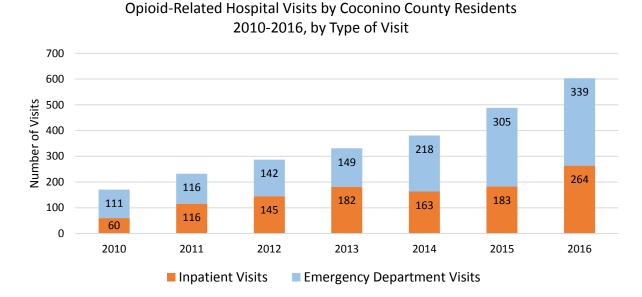
Drug and Alcohol Induced Deaths Among Coconino County Residents, 2015



Opioid-Related Hospitalizations and Emergency Department Visits

Has the number of people going to the hospital for opioid-related reasons increased?

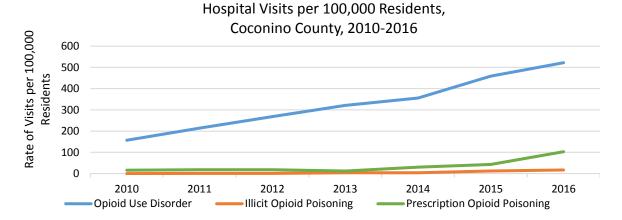
From 2010 to 2016, Coconino County saw a 285% increase in the number of emergency department visits and hospitalizations related to opioid use. As reflected in the chart below, both types of visits increased over the time period.



Note: Data is not representative of all hospital facilities in Coconino County. Data from the Tuba City Regional Healthcare Center is not available.

What are the reasons for opioid-related visits?

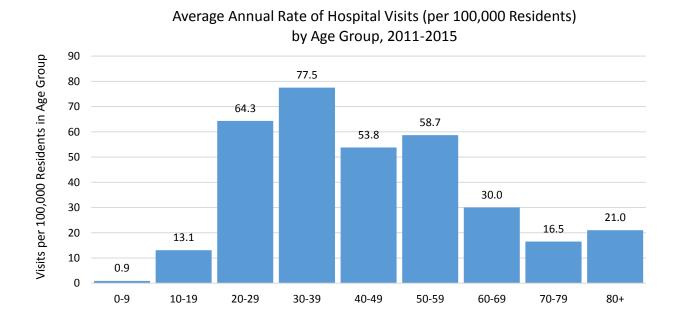
Opioid-related visits include hospital visits for any opioid poisoning, abuse, or dependency. Therefore, an opioid use "disorder" visit may be a visit for a patient who is seeking help for their opioid addiction. "Poisoning," which is much less common, includes overdoses (suicide attempts or unintentional overdoses).



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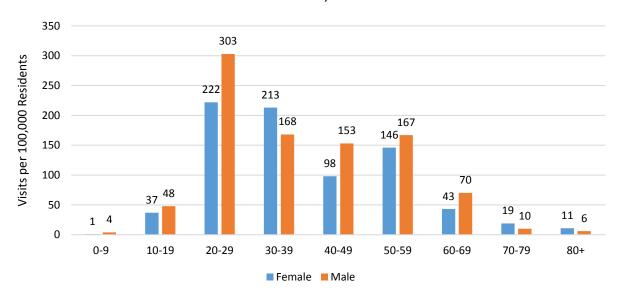
Who is at risk for going to the hospital with an opioid-related issue?

The rate of visits was highest in young to middle-aged adults, ages 20-59. As was the case for opioid poisoning deaths, over 50% of visits were among people in the 20-39 years of age group; however, rates still show that this is a problem for some older adults.



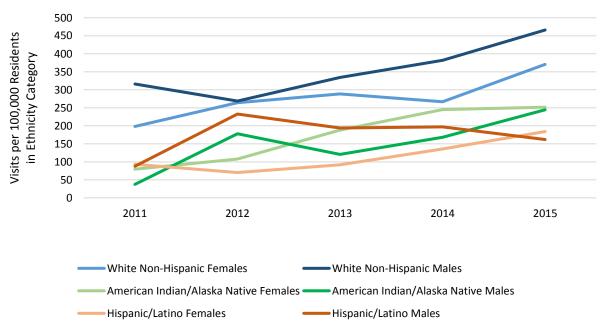
As shown in the chart below, the rate of visits was higher in men than women, with some variance by age group. Men aged 20-29 had a particularly high rate.

Average Annual Rate of Hospital Visits per 100,000 Residents by Age Group and Gender, 2011-2015



White non-Hispanic men and women had the highest rates of opioid-related visits, which is consistent with the pattern in opioid deaths, followed by Native American and Hispanic/Latino residents. Other ethnic groups had numbers too small to be visually represented on this chart.

Annual Rate of Visits per 100,000 Residents, by Gender and Ethnicity, Coconino County 2011-2015



The rate of visits increased among all racial/ethnic groups shown from 2011 to 2015; however, it increased most significantly among Native American/Alaska Native residents, and especially among males, as shown in the table below.

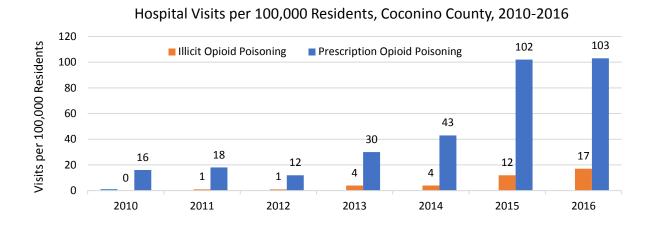
Percent Increase in Rate of Visits from 2011 to 2015

White Non-Hispanic
Native American/Alaska Native
Hispanic/Latino

Female	Male
187%	147%
316%	653%
198%	184%

Are illegal drugs responsible for the opioid poisoning hospital visits?

As opioid poisoning visits increased over the period, there were some differences in the types of opioids used. As shown in the graph below, hospital visits for poisonings by prescription opioids were more common and increased more dramatically than poisonings by illicit opioids.



Conclusions

As is the case across the nation, Coconino County is experiencing an increase in opioid poisoning, particularly with prescription opioids. However, the severity of the problem is less than in other areas of Arizona and the U.S. In addition, in Coconino County, opioid poisoning is far less prevalent than other preventable diseases and conditions, such as injuries. Efforts to monitor and reduce opioid poisoning should be pursued, particularly when these efforts include all forms of substance abuse which can help to reduce injuries such as motor vehicle accidents, homicide, and suicide.